SPECIFICATIONS

System	
Processor	Intel® Atom™ Z530, 1.6GHz
Memory (RAM)	2GB DDR2 533MHZ
Storage	2GB to 32GB Flash
Operating Systems	Microsoft® Windows® Embedded Standard 7, Windows® 7 Professional, Windows® XP Embedded; Windows® XP Pro for Embedded Systems, or Linux
Display	8.9" LED-backlight screen with resistive touch; sunlight-readable LCD option
Display Resolution	1024 x 600 (WSVGA)
Network Interface	Wi-Fi 802.11a/b/g/n, Bluetooth 2.1 with EDR
Trusted Platform Module	Yes, TPM 1.2 support
Control Switch and Buttons	1 power button, 7 front buttons and 1 trigger button
Indicator	1 power/ battery status LED and 1 WLAN active LED
Speaker/Microphone	Built-in speaker; built-in internal microphone
Input/Output Ports	1 DC-in Jack; 1 USB 2.0 ports; 1 Headphone-out Jack combined with microphone, 1 Full Slot Smart Card Reader
Full Slot Smart Card Reader	Reads ISO 7816 T=0, T=1; EMV 2000 certified, 1.8/3/5V smart card
Power	
AC/DC Adapter	**Input:** 100 – 240V AC; **Output:** 18.5V DC, 3.89A
Battery Pack	Internal 7.4V, 3760mAh/ **Optional:** External 7.4V, 3760mAh/ 7.2V, 3900mAh
Mechanical	
Enclosure	ABS + PC plastics
Stylus	Non-electronic tip
Protective Bumpers	Rubber bumpers on each corner for handling protection
Dimensions (H x W x D)	7.7 x 10 x 1.25 in/ 196 x 256 x 32 mm
Weight	2.43 lbs/ 1.1 kg
Environmental	
Water and Dust Resistance	IP64 * IP64 rating may not be applicable for units with module options
Vibration and Shock Resistance	MIL-STD-810G
Regulatory	FCC Class B, CE, C-Tick, RoHS compliant
Temperature	**Operation:** -20°C - 40°C **Storage:** -20°C - 60°C
Humidity	0% - 90% non-condensing

* Specifications subject to change without notice.

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BOG030712DT390MDENG

DT Research

Medical Mobile POS Tablet

DT390MD

BASIC OPERATION GUIDE

ENGLISH

INTRODUCTION

Thank you for acquiring the latest addition to DT Research's line of mobile tablets— the DT390MD. Featuring an IP64-rated, slim yet robust enclosure, the two-pound DT390MD with 8.9" TFT display is powered by the Intel® Atom™ processor, offering optimal combinations of performance and power savings. An external battery expansion option provides approximately 3-4 hours of additional battery operation for up to eight hours of mobile usage.

The DT390MD is available with Windows® Embedded Standard 7, Windows® XP Embedded, Windows® XP Pro for Embedded Systems, Windows® 7 Pro or Linux operating systems. Each software operating system features web browser, client/server computing software, media player, accessories, and applications support.

PACKAGE CONTENTS

- DT390MD with Internal Battery Pack, Stylus and Bumpers
- AC-DC Power Adapter with Power Cord
- Basic Operation Guide
- Handstrap

Major options, depending on configuration:

- Desktop Charging Cradle with DC-in Power Jack and Ethernet/ USB Ports
- X-handstrap
- External External Battery Pack and Battery Charger Kit
- Vehicle/ Wall Mount Cradle

* If your DT390MD contains MSR, half-slot smart card reader, RFID reader, camera, 3G or scanner module, please refer to the POS module operation guide for detailed operation.

The DT390MD (with Windows XP Operating System)

Input/ Output Ports

A	Headphone Jack
B	USB Port
C	DC Power Input
D	Full Slot Smart Card Reader

Button Functions (with Windows XP Operating System)

BUTTON	ACTION
1 2 3	Programmable
4	Programmable, launch soft (on-screen) keyboard (default)
5	Launch SAS (Secure Attention Sequence) Generate Ctrl+Alt+Del keys to invoke the security windows defined under Windows XP
6	Programmable, Calibrate touch screen before log on the operating system Change display orientation (portrait/ landscape) (default)
7	Programmable, system utility menu (default)
8	Programmable, As scanner trigger when equipped with the scanner module
9	Power on, Push/release typically enters Standby mode, or Push/release exits Standby mode or restarts device (software dependent) Push and hold (over 4 seconds) invokes hardware shutdown

Power/Battery LED Status:

- Blue indicates the battery is 25% to 100% charged
- Blinking blue indicates the battery is charging
- Orange indicates that the battery is between 11% to 25%
- Blinking orange indicates that the battery is below 10%

Precautions

- Always exercise care when operating and handling the DT390MD.
- Do NOT apply excessive pressure to the display screen.
- We recommend using the Stylus provided to keep the screen clean.
- Avoid prolonged exposure of the display panel to any strong heat source. Wherever possible, the DT390MD should face away from direct light to reduce glare.
- If the AC-DC power adapter is used to recharge or power the device, do NOT use any AC-DC adapter other than the one provided with the device or acquired from the manufacturer or its partners.
- In the unlikely event that smoke, abnormal noise, or strange odor is present, immediately power off the DT390MD and disconnect all power sources. Report the problem to your device provider immediately.
- Never attempt to disassemble the DT390MD, as this will void the warranty.

Basic Features

The DT390MD wireless tablet integrates a bright and responsive touch display, 1 USB port, and embedded networking elements such as wireless LAN or optional 3G. The primary device is complemented by a suite of accessories, including battery expansion, docking cradles, and wall/ vehicle mount cradles, for a comprehensive user experience.

A DT390MD typically integrates an 802.11a/b/g/n wireless LAN (WLAN) adapter that may connect to other wireless devices or access points. If your DT390MD does not come with such a network adapter, please consult your device provider to establish the desired network connectivity.

OPERATION

Internal Battery

Warning! ⚠
The Internal battery pack should only be replaced by an authorized DT Research service representative. Please contact your product and/or service provider for internal battery replacement service.

Powering ON and OFF

To activate the DT390MD, push and quickly release the Power Button. The display will come on in a few seconds. To put the DT390MD in Standby mode, push and quickly release the Power Button. To turn the DT390MD off for extended storage, power off the device safely using any software function that “shuts down computer” provided in the software operating system.

NOTE: The battery packs shipped with your device may be low in power—please use the AC-DC adapter with the DT390MD when setting up the device for the first time to fully charge the internal battery pack. You may charge the external battery pack with it attached to the DT390MD, or with the optional external battery charger kit.

NOTE: When the battery pack(s) is (are) charging, the blue-colored Battery LED should blink slowly. If plugging in the AC-DC adapter does not trigger this blinking activity and the LED stays dark, the battery pack(s) may have been drained substantially. Try unplugging/ replugging the AC-DC adapter to the DT390MD a few times to activate the charging process.

NOTE: To conserve power, use (push and quick release) the Power Button to put the device in “Standby” mode while not in use. Pushing briefly on the same button will wake up the system within seconds.

NOTE: Avoid using the Power Button (“hold 4+ seconds” feature) to turn off the device—this form of hardware shutdown is intended to be a means of recovery from device lockups, and not as normal operation.

Start Up

If the power up (from Standby or otherwise) is successful, the appropriate interface will be displayed after a launch sequence of several seconds. The wireless LAN connection may take 10-15 seconds to be established.

Configuring the DT390MD

The device may be configured using the utilities and methods dictated by the software operating system. The DT390MD should be configurable for various properties such as user profiles, network features, and several system elements.

Calibration

The touch display for the DT390MD is calibrated before shipping. In the event that the calibration has been modified or is unsatisfactory, the respective calibration routines (e.g., PenMount (PM) for Windows XP) to calibrate the touch interface may be used. Such applications are typically executed through touch input via Stylus or through mouse click via a USB mouse.

Wireless Networking

Wireless LAN

The DT390MD is often delivered with an embedded (user-inaccessible) 802.11a/b/g/n WLAN adapter equipped with a hidden custom antenna.

- Through the support of typical WLAN adapters, the DT390MD should be able to detect all 802.11 access points in the vicinity for you to select the access point of your choice for connection.
- The SSID and WEP/WPA/WPA2 (if enabled) parameters on the DT390MD and the access points have to match. The SSID is case-sensitive and it is recommended that you enable WEP/WPA/WPA2 encryption (or advanced alternatives) for secure access.
- When WEP/WPA/WPA2 is enabled, you may need to consult your network administrator or your networking equipment literature to properly configure associated settings such as Authentication mode, etc.
- Refer to the access point operating manuals for setting up the 802.11 access points.

Button Management

Where supported by software, many of the hard buttons on the DT390MD are programmable to perform a function of the user's choice. The exception is the Power Button and the SAS Button. To activate the button re-assignment application, invoke the Button Manager application, e.g., in Windows XP Embedded .

Brightness Control

Where supported by device firmware and software, a hard button may be engaged to manipulate the display brightness. Press the System Utility Menu button (Button 7) on the front of the DT390MD. The System screen will display a Brightness control section with up and down arrows that can be activated with the stylus.

Battery and Power Management

The DT390MD is equipped with an internal 3760mAh Li-Ion battery pack that is capable of supporting approximately 3 - 4 hours of continuous operation. With the internal battery and an external battery pack that clips (hot-pluggable) onto the back of the device, the maximum period of continuous operation will be approximately 6 - 8 hours. The period between battery recharges can be significantly lengthened by putting the device into Standby mode through the Power Button (see Buttons Function Table) whenever the device is not in use. Depending on the operating software, the DT390MD may also be configured to enter various power-saving modes via the Power Button or through timed entry.

Full Slot Smart Card Reader

The DT390MD comes with a full slot smart card reader.

- Remove the rubber and insert a card (Picture 1).
- Use the stylus to pull the metal pull and then remove the card (Picture 2).

(Picture 1)

(Picture 2)

USING THE DT390MD

Memory & Storage Configuration

The DT390MD is available with 2GB memory configuration. Storage options currently range from 2GB to 32GB flash memory.

Peripherals Support

Through its USB port, the DT390MD supports a wide range of USB-based peripherals. These peripherals are applicable for software installation, applications storage, data storage, docking or software recovery and update.

The DT390MD is complemented by an optional Desktop Cradle or Wall/ Vehicle Mount Cradle for support, pass-through charging, and connection to a range of USB peripherals, including keyboard and mouse. The Cradles offer the following interfaces: a DC-in port for the AC-DC adapter, an Ethernet port, a VGA output and USB ports. Always seat the DT390MD securely onto the cradle. The cradle must be powered by the AC-DC adapter for the Ethernet and USB ports to function. The battery packs on the DT390MD may be recharged by connecting the AC-DC adapter directly to the DC-in port on the DT390MD or through the DC-in port on the Cradle while the DT390MD is docked.

For More Support

Users can download the Software Utility and Modules Operation Guides from the DT Research website.

If the DT390MD comes with a 3G module, please contact your product and/or service provider for the SIM Card Slot Location and Insertion Guide.